

75th Air Base Wing



Effective Compliance & Recordkeeping Strategies for Refrigerant Containing Assets

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Report Documentation Page

*Form Approved
OMB No. 0704-0188*

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1. REPORT DATE JUN 2010	2. REPORT TYPE	3. DATES COVERED 00-00-2010 to 00-00-2010		
4. TITLE AND SUBTITLE Effective Compliance & Recordkeeping Strategies for Refrigerant Containing Assets			5a. CONTRACT NUMBER	
			5b. GRANT NUMBER	
			5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S)			5d. PROJECT NUMBER	
			5e. TASK NUMBER	
			5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) 75th Air Base Wing, 75 CEG/CEVC, Hill AFB, UT, 84056			8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)			10. SPONSOR/MONITOR'S ACRONYM(S)	
			11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release; distribution unlimited				
13. SUPPLEMENTARY NOTES Presented at the NDIA Environment, Energy Security & Sustainability (E2S2) Symposium & Exhibition held 14-17 June 2010 in Denver, CO.				
14. ABSTRACT				
15. SUBJECT TERMS				
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT Same as Report (SAR)	18. NUMBER OF PAGES 16
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified		



Outline

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Objective

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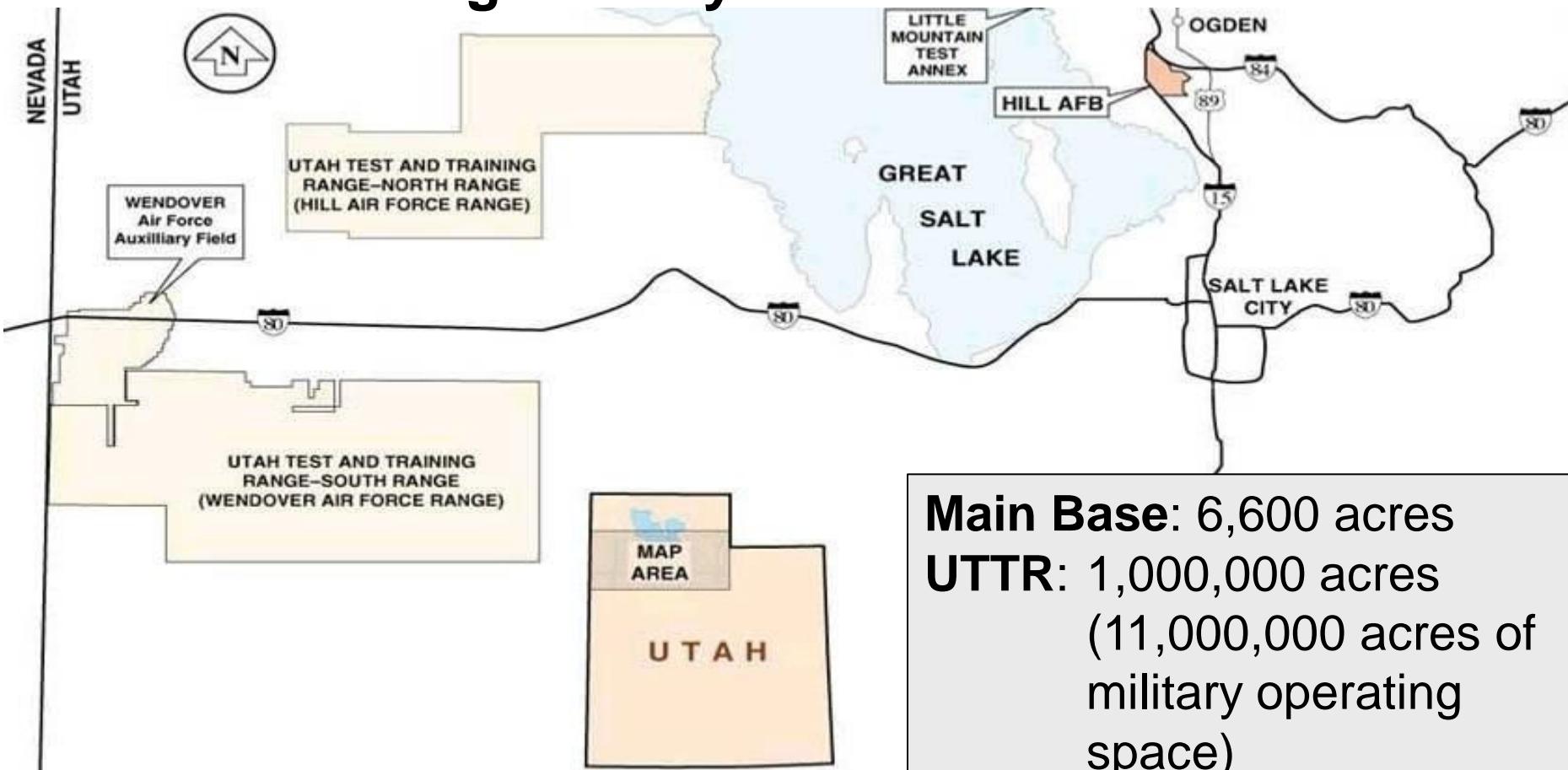
- Improve compliance monitoring, record keeping, and reporting of Ozone Depleting Substances (ODS) at Hill AFB by:
 - Implementing more thorough refrigerant data management techniques
 - Reducing the risk of non-compliance involving recordkeeping for ODS



Hill AFB ODS Background

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■ Hill AFB—a large facility:

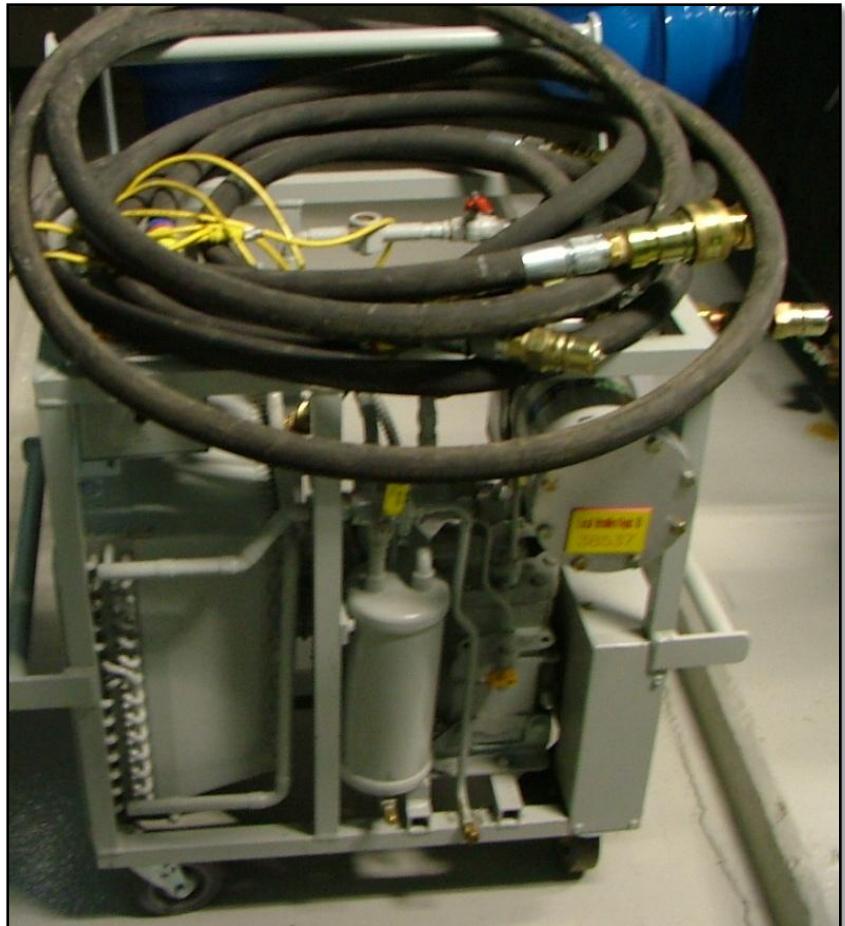




Hill AFB ODS Background

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- 16 refrigerant recycling processes
- Nearly 200 appliances 50 lbs or greater subject to 40 CFR 82
- Largest units:
 - Two 1,200 lb units supporting mission-critical applications at the Defense Information Systems Agency



Hill AFB-owned refrigerant recycling unit



Hill AFB ODS Background

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■ ODS Regulatory Drivers:

■ Montreal Protocol of 1987:

- Intent to cease production of ODS
- Incorporated into Clean Air Act (CAA)

■ Title VI of the CAA 1990 amendments, “Stratospheric Ozone Protection”:

- Encourages using safer chemicals
- Requirements incorporated into 40 CFR 82



Hill AFB ODS Background

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- **ODS Regulatory Drivers, cont'd:**
 - **Code of Federal Regulations (CFR) Title 40, Part 82, "Refrigerant Recycling and Emissions Reduction":**
 - Addresses the handling, recycling and disposal of ODS-containing appliances
 - **Hill AFB Title V Air Quality Operating Permit:**
 - Requires Hill AFB to adhere to 40 CFR 82 requirements

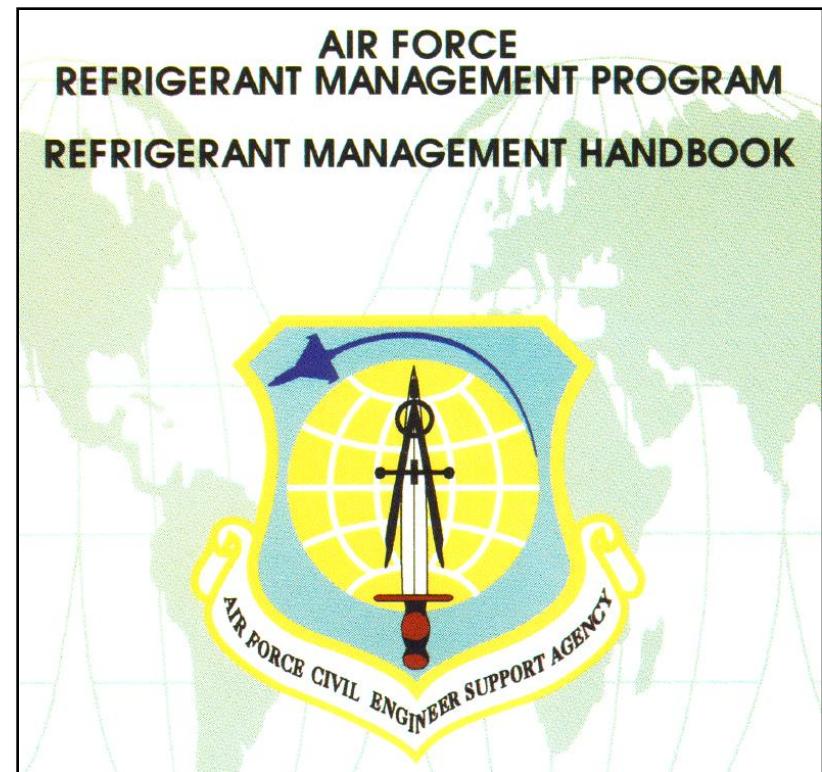


Hill AFB ODS Background



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- ODS Compliance Drivers, cont'd:
- **AFD-070613-041, *Air Force Refrigerant Management Handbook*** does NOT address:
 - Recent Green House Gas (GHG) inventory regulations
 - EPA's Significant New Alternatives Policy (SNAP) covering phase-out and alternative products



AFD-070613-041



Hill AFB ODS Background

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- Nation-wide increased focus on ODS compliance during EPA multi-media inspections
- Common ODS violations:
 - Inadequate recordkeeping associated with equipment/technician certifications
 - Inadequate recordkeeping involving servicing details, leak checks, and leak rates
- Air Force Material Command initiated Notice to Airmen (NOTAM):
 - Prompted facilities to proactively gather data to illustrate ODS compliance in case of inspection



Improving ODS Procedures

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- Partially in response to the NOTAM, Hill AFB data collection and management efforts include:
 - Inventorying certain equipment subject to Title VI requirements
 - Creating a refrigerant leak rate calculation algorithm, and archiving refrigeration technician certification documents in the AF-approved air quality data management system
- Data collection methods:
 - Using existing appliance information
 - Conducting inspections and research



Improving ODS Procedures

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- Hill AFB improvements to the existing air quality data management system include:
 - Better identification of ODS recovery/recycling equipment
 - Increased inspection frequency for refrigerant equipment from annually to semi-annually
 - Improved checklists for ODS source inspections
 - Identification of refrigerant-containing equipment maintenance contractors to ensure compliance with 40 CFR 82
 - Identification of construction projects with new equipment subject to 40 CFR 82



Improving ODS Procedures

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- The improved system will house:
 - Equipment model numbers and serial numbers
 - Charge capacities
 - Service dates
 - Net refrigerant loss
 - Annualized leak rates
 - Amounts of refrigerant recovered and added
 - Types of refrigerants used
 - Technicians' names

Create ODC Usage Record

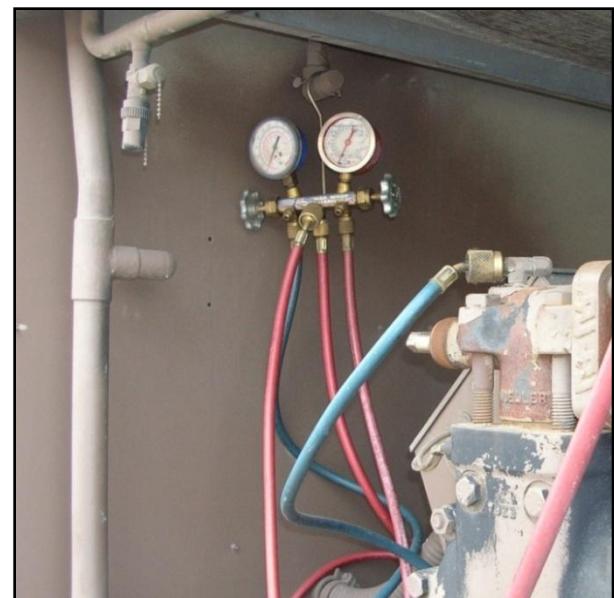
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Added: *	<input type="text"/> (in lbs)
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Improving ODS Procedures

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- The improvements will support:
 - Leak rate recordkeeping and reporting
 - 5-year records archive:
 - Technician credentials
 - Equipment certifications
 - Equipment maintenance logs
 - Repair reports



Air Conditioning Repair in Progress



Lessons Learned--Risk Reduction

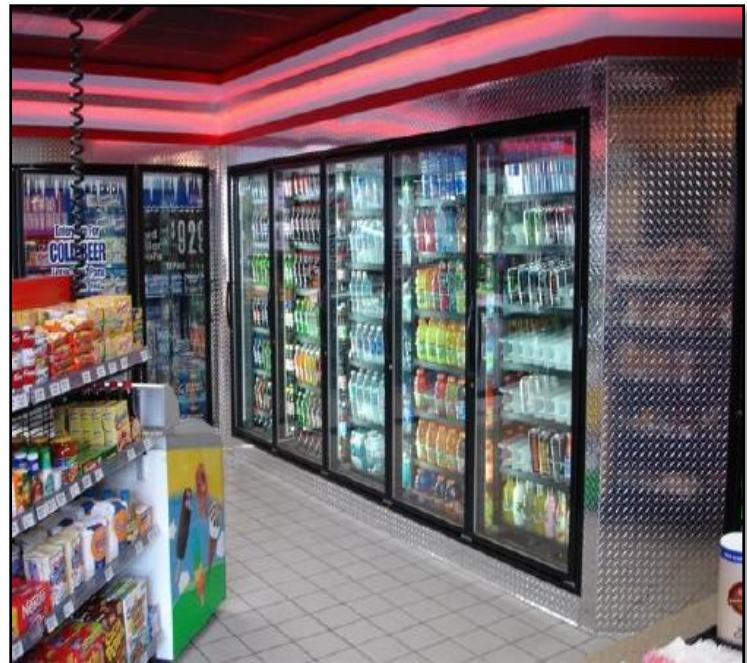


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■ ODS compliance risks:

- Maintenance and repair contractors
- Leak rate calculation and reporting
- New/Modified appliances
- Missing technician certification records

■ By improving ODS recordkeeping, the AF-approved air quality data management system will reduce risk



Convenience Store Cooler



Summary

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- EPA is cracking down on ODS non-compliance
- There are many compliance risks associated with ODS
- To improve ODS data management, Hill AFB is improving their air data management system
- Hill AFB is currently inventorying ODS equipment
- The AF-approved air quality data management system will improve recordkeeping and ease reporting for ODS



Questions?



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